along a direction in which light from the light source advances, and a display image transmitted from the transmission type image display device is transferred to the photosensitive recording medium, and wherein the transmission type image display device and the photosensitive recording medium are arranged in a non-contact state, and a distance between the transmission type image display device and the photosensitive recording medium and a sum total of thicknesses of a substrate and a polarizing plate at least on a side of the photosensitive recording medium in the transmission type image display device are set in accordance with a definition of the display image.

Preferably, the sum total is not more than 1.0 mm.

Preferably, the distance is 0.01 mm to 3 mm.

Preferably, the display image and the image transferred to the photosensitive recording medium are substantially identical in size.

Preferably, each pixel size of the image display device is not more than 0.2 mm.

It is preferable that the transfer apparatus further comprises a substantially parallel rays generating element arranged between the light source and the image display device.

Preferably, the substantially parallel rays generating element comprises a porous plate having a plurality of through-holes, and wherein the porous plate has a thickness not less than three times the diameter or equivalent diameter of the plurality of through-holes.

Preferably, the plurality of through-holes are parallel to each other and have a circular or polygonal cross section.

BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings:

Fig. 1 is a schematic side sectional view of a transfer apparatus according to an embodiment of the present invention;

Fig. 2 is a conceptual side sectional view showing a main portion of the transfer apparatus shown in Fig. 1;

Fig. 3 is a perspective view showing the construction of an embodiment of a transmission type liquid crystal image display device used in the transfer apparatus shown in Fig. 1;

Fig. 4 is a perspective view showing the construction of an embodiment of a film pack used in the transfer apparatus shown in Fig. 1;

Fig. 5 is a perspective view illustrating an

experiment method according to a comparative example;

Fig. 6A is a diagram illustrating the arrangement of through-holes in a porous plate used in the embodiment;

Fig. 6B shows an example of a substantially parallel rays generating element used in the present invention;

Fig. 6C shows another example of the substantially parallel rays generating element used in the present invention;

Fig. 7 is a side view showing the construction of an example of a conventional transfer apparatus; and

Fig. 8 is a perspective view showing the construction of another example of a conventional transfer apparatus.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A transfer apparatus according to a preferred embodiment of the present invention will now be described in detail with reference to the accompanying drawings.

Fig. 1 is a schematic side sectional view of a transfer apparatus according to an embodiment of the present invention, and Fig. 2 is a conceptual side sectional view showing a main portion of the transfer apparatus shown in Fig. 1.

As shown in these drawings, the transfer apparatus of the present invention comprises a back light unit 1 serving